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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/993,649	11/27/2001	Nobuhiro Ueno	1275.1027	8101

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STAAS & HALSEY LLP
SUITE 700
1201 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005

EXAMINER

KIANNI, KAVEH C

ART UNIT	PAPER NUMBER
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2877

DATE MAILED: 03/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/993,649

Applicant(s)

UENO, NOBUHIRO

Examiner

Kevin C Kianni

Art Unit

2877

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 11 is/are rejected.
- 7) ☒ Claim(s) 2-10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 November 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. Figure 6 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance. As stated by applicant in page 2, last paragraph-page 3, first paragraph of specification, the drawing of fig. 6 belongs to another application US 6,169,826 that has a filing date of May 7, 1999 and is thus considered to be a prior art.

Allowable Subject Matter

2. Claims 2-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 2 is allowable because the prior art of record, taken alone or in combination, fails to disclose or render obvious a second coil member wound around the second yoke to adjust the magnetic flux between the movable holder and the second pole piece in combination with the rest of the limitations of the base claim. Claims 3-10 depend on claim 2 and therefore they are also allowable.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maenishi et al. (US 5,905,829).

Regarding claims 1 and 11, Maenishi teaches an optical switch for connecting and/or disconnecting an optical path (shown in at least fig. 1; see abstract), comprising:

a housing having at least two end walls facing each other (see at least fig. 1/28, item base/casing/housing with end walls; see also col. 23, lines 56-66);

at least one fixed optical fiber 2a-c having an open end 7 adjacent to one of the end walls in the housing (see fig. 1, item 2a-c near the end wall, at left, also col. 12, lines 46-54);

at least one movable optical fiber 4a-c having an open end 9 capable of moving relatively to the open end 7 of the fixed optical fiber 2a-c (see at least col. 14, lines 42-53) the open end 9 of the movable optical fiber 4a-c being located in the housing;

a fulcrum 16a/16b fixing the movable optical fiber 4 at a distance from the open end 9 of the movable optical fiber 4 and located near the other end wall in the housing (see fig. 1. item 16a or 16b, near the wall at right; see col. 14, lines 66-col.15, line 11, also col. 44, lines 19-24);

a movable holder 15b of holding the movable optical fiber 4 adjacent to the open end 9 of the movable optical fiber 4 and allowing the movable optical fiber 4a-c to resiliently pivot on the fulcrum to move the open end 9 of the movable optical fiber 4 relatively to the open end 7 of the fixed optical fiber 2a-c (see fig. 1, item holder 15b movable by actuator member 5/5a via connecting member 17; see col. 15, lines 16-30);

and an electromagnetic actuator 5 reciprocating the movable holder 15b, the electromagnetic actuator 5 being located in an area on the movable optical fiber 4a-c side from the open end 9 of the movable optical fiber 4a-c in the housing (see col. 15, lines 16-30).

However, in above embodiment Maenishi does not explicitly teach wherein the above movable holder is of magnetic material. Maenishi teaches this limitation more specifically in another embodiment (see at least col. 8, lines 12-21). Thus, it would have been obvious to a person of ordinary skill in the art when the invention was made as matter of design choice to use the material of the movable holder 15b of a magnetic material, since different embodiments of Maenishi's teachings with regard to different implementation of switching system having essentially similar signal exchanges between input and output channels are thus compatible with each other and because such material would enable control alignment, by magnetic driven force, of optical fibers and would protect the fibers by absorbing and relieving excessive movement and impact (see col. 8, lines 12-29).

Citation of Relevant Prior Art

5. Prior art made of record and not relied upon is considered pertinent to applicant's disclosure. In accordance with MPEP 707.05 the following references are pertinent in rejection of this application since they provide substantially the same information disclosure as this patent does. These references are:

Emmons 5031994 teaches closely related to the teachings of claims 1 and 11

Murakami 5926588 teaches movable arms for switching operation

Yoshitani et al. 5268975 optical switching between two sets of fibers

Yokomachi et al. 5483608 optical switching between two sets of fibers

Yokoyama et al. 6094293 optical switching between two sets of fibers

Li et al. 6215919 B1 optical switching between two sets of fibers

These references are cited herein to show the relevance of the apparatus/methods taught within these references as prior art.

Contact Information

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to K. Cyrus Kianni whose telephone number is (571) 272-2417.

The examiner can normally be reached on Monday through Friday from 8:30 a.m. to 6:00 p.m. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank Font, can be reached at (571) 272-2415.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9306 (for formal communications intended for entry)

or:

Hand delivered responses should be brought to Crystal Plaza 4, 2021 South Clark Place, Arlington, VA., Fourth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application should be directed to the Group Receptionist whose telephone number is (703) 308-0956.

A handwritten signature in black ink, consisting of a stylized 'K' followed by a long, wavy horizontal line.

K. Cyrus Kianni
Patent Examiner
Group Art Unit 2877

March 8, 2004